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Veronica reniformis Pursh, Fl. Am. Sept. 1: 10. 1814. "Collected by Messrs. Lewis and Clark in boggy soil, on the banks of the Missouri . . . v. s. in Herb. Lewis." Type was apparently a plant collected on Hungry Creek, in what is now Montana, June 26, 1806, and an isotype of this in the Herbarium of the Academy of Natural Sciences of Philadelphia was determined by Robinson and Greenman [in Proc. Acad. Nat. Sci. Phila. 1898: 39. 1898] as Synthyris reniformis major Hook. Pursh's description is inaccurate, but I think must certainly apply to this collection which is the species, S. major (Hook.) Heller. Veronica rotundifolia Ruiz & Pavon, Fl. Peruv. et Chil. 1:6. 1798. "Habitat copiose in Peruviae uliginosis ad Pillao vicum." This is a species of Sibthorpia. Veronica sparsiflora Raf., Atl. Jour. 79. 1832. Described from a plant in the Bartram Botanical Garden, Philadelphia, Pa., which was said to have been "native of Arkansas or Texas, received from Prof. Nuttall." I know of no American species at all fitting this description: "stem erect, simple round solid, leaves opposite sessile cuneate oblong entire obtuse. Raceme terminal lax very long, flowers scattered, bracts linear oblong obtuse, pedicels filiform. Capsules bilobed subcompressed. Annual Stem 1 or 2 feet high. Flowers vernal purpurescent handsome. Corolla rotate, segments of the calix unequal oblong, obtuse " Is it a foreign species, or not a Veronica?

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AN ESTUARIAN VARIETY OF SCIRPUS SMITHII.

NORMAN C. FASSETT

WHILE examining material of Scirpus Smithii Gray, collected last August on the banks of the Cathance River at Bowdoinham, Maine, the writer found that all the individuals from that locality had achenes with a perianth of bristles which differed from those of var. setosus Fernald by their complete lack of barbs. Material from Back River Creek in Woolwich and from the Androscoggin River at Brunswick proved on examination to have similar smooth bristles about the achene. The length of the bristles, moreover, instead of being uniform and greater than that of the achenes, as in var. setosus, was variable even on the same achene, and while an occasional bristle exceeded it, this was not common, and there were no cases in which all the bristles exceeded the achene. The number of bristles was also

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more variable, ranging from two to six, instead of from four to five as in var. setosus. The color of the achenes, running from almost black to almost white in S. Smithii and its variety with barbed bristles, darker toward the base of the spikelet (a matter, doubtless, of degree of maturity), in this case varied greatly, but seemed to average lighter than in the other forms of the species, the deep brown never reaching the almost ebony shades of the common types.

This condition of smooth-bristled varieties in the Cyperaceae frequently occurs, as for example in Rynchospora capitellata (Michx.) Vahl., var. discutiens (Clarke) Blake, and in R. capillacea Torr., var. leviseta E. J. Hill. Eleocharis Engelmanni Steud., var. detonsa Gray has the bristles absent, or when present smooth and reduced to mere rudiments, but they are variable and may even in some cases exceed the achene, in this variability being more closely parallel with the estuarian Scirpus than are the two Rynchosporas.

This new plant exhibiting these characters comes from a locality which has already produced some remarkable species.¹ Many of the rivers of Sagadahoc County have their mouths drowned twice a day by the rising tide, producing muddy estuaries. Merrymeeting Bay, a few miles above Bath, has no salt water, but has a strong tide

which extends far up the five rivers which enter it, including the Kennebec, the Androscoggin, and the Cathance. Thus along their banks there is left uncovered twice a day a wide stretch of mud, upon which a rank vegetation flourishes. Then, when the muddy and somewhat brackish water is forced back by the rising tide, these flats are covered to a depth of several feet. Back River Creek, a stream which has a similar estuary on a much smaller scale, is separated from this system by a short stretch of salt water, but it is not surprising to find this little sedge there also. Indeed there is another estuarian plant which is apparently confined to these same localities: Bidens Eatoni Fernald, var. kennebecensis Fernald was collected at Cathance River and at Back River Creek by Professor Fernald and Mr. Bayard Long in 1916, and has not been observed anywhere else.

This new phase of Scirpus Smithii may well take the name of: SCIRPUS SMITHII Gray, var. levisetus, n. var., setis 2-6, levibus vel rare subscabris, 0.5-2 mm. longis, achenio castaneo plerumque brevioribus.

¹ See RHODORA 19:91. 1917.

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The 2-6 bristles perfectly smooth or rarely slightly roughened, 0.5-2 mm. long, mostly shorter than the chestnut-brown achene.— MAINE: border of salt-marsh, Back River Creek, Woolwich, Sept. 15, 1916, *Fernald & Long*, no. 12830; tidal mud-flats of the Cathance River, Bowdoinham, Sept. 14 & 19, 1916. *Fernald & Long*, no. 12829; Brunswick, Aug. 6, 1894, C. A. Davis; muddy bank of the Androscoggin River, Brunswick, Sept. 15, 1904, *Kate Furbish*; tidal flats of the Cathance River at Bowdoinham and at its mouth in Merrymeeting Bay, Aug. 25-Sept. 2, 1920, *Fassett* (TYPE in Gray Herb.). HARVARD UNIVERSITY.

EQUISETUM FLUVIATILE OR E. LIMOSUM? M. L. FERNALD AND C. A. WEATHERBY.

FOR nearly fifty years before the publication, in 1893, of the List of Pteridophyta and Spermatophyta of Northeastern North America, the common horsetail of our marshes and river-shores was universally known to American botanists as Equisetum limosum L. In that work, the first attempt to apply the provisions of the American Code, the name E. fluviatile was substituted. This change was made because the species, as now and for more than a century understood, includes both E. limosum and E. fluviatile of Linnaeus and of the two names, published on the same page of the Species Plantarum, the latter has priority of position and had to be taken up under Canon 13 of the American Code. A. A. Eaton adopted it in his treatment of the North American Equiseta in the Fern Bulletin and in the seventh edition of Gray's Manual; and it is now nearly as generally used in America as was its predecessor twenty years ago. In Europe, however, the great majority of authors have retained E. limosum. This circumstance and the further fact that the International Rules do not admit priority of position in cases where two groups of the same rank, published at the same time, are united, but require the retention of that one of the two names chosen by the author who first suggests the union, raise the question whether, after all, E.

fluviatile is the correct name.

In order to answer this question satisfactorily, it is necessary to consider in some detail the nomenclatorial history of the species. *E. fluviatile* first appears in the *Flora Lapponica*, 310 (1737). Its identity is fixed by the existence in Linnaeus' herbarium of a speci-